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22 February 1972

MEMORANDUM FOR: General Taylor

SUBJECT   :   Assistance in Preparing Briefing on CIRIS for
                   ASD(I)

1. As I believe you know, Mr. Tweedy has instructed Admiral Showers and me to prepare a briefing on CIRIS for Dr. Hall. No date has been set yet, but we believe it will be given in the latter part of this week. I am focussing on CIRIS background and development to date; Mac Showers is presenting specific examples of CIRIS use and looking to the future and to ways of making CIRIS more useful to high level consumers. *in various arrays.*

2. The general theme is that a community information system, with a common language, makes sense as an alternative to ad hoc data calls. and to commonality of presenting data output and conclusions. It follows that such a common system must have a potential utility to ASD(I) as well as to ourselves in order to justify the effort to put it together and operate it.

3. The particular area where your assistance would be invaluable relates to the proper responses that should be made in case Dr. Hall inquires about how the CIRIS-type data base can be made more promptly responsive to him and to his staff. In this area of the discussion, I think there are three alternatives for consideration. I am stating them below, and adding my non-technical observations and comments. However, I think it would be inappropriate to enter such a dialogue with Dr. Hall without a further technical back-up and possibly a clearer understanding of the DCI/NIPE and CIA's <u>ability</u> and <u>willingness</u> to commit resources to improving the ASD(I) data retrieval and manipulation capability.

4. The three main alternatives, I believe, are:

(a) <u>DCI/NIPE and OCS could transfer CIRIS tapes to ASD(I) for the latter to run on DOD computers in order to manipulate and recover data.</u> This would, theoretically, produce hard copy output.

(b) <u>A remote terminal in ASD(I) offices could be run from the CIA headquarters building, to provide ASD(I) with a remote query capability, and a printout of answers to queries.</u>

(c) <u>DCI/NIPE/CIRIS Staff could provide all the support required by ASD(I),</u> without either a transfer of tapes or a remote terminal.

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5. Transfer of Tapes, etc. This is an unsatisfactory and not feasible solution. To be successful from the ASD(I) user point of view, it is necessary not only to transfer tapes but also to transfer the know-how to operate the tapes. This solution is at least a year away.

(a) The CIRIS system can be run successfully within the CIA Hdqtrs building for NIPE use, but this is because we are all so close together and have been working so long as a team. [   ] group know **25X1** the history of CIRIS; they have written the programs; they know the minor quirks and peculiarities and the patching and piecing they have done to create the software and operate it, in addition to the new programs.

(b) CIRIS is still, however, in a developmental mode. It is operational, but it is still changing. For example, in the new CIRIS for calendar year 1972, we have introduced quite a number of new subjects and related them to DCID 1/2 Objectives. We have expanded geographic targets. We have added two sensors. There is nothing wrong with this process of change; it must occur. But it means that we do not have a stable system.

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(c) Since the system has not been stabilized, it would be an unprofitable exercise to write the necessary technical documentation that would be required to accompany the transfer of tapes to ASD(I) and DOD computer operators. [   ] estimates there is about one man year of programmer effort that will be required to "document" the CIRIS software once the system has been "stabilized." Considerable secretarial support is also required to transcribe this documentation.

(d) Once the CIRIS system has been stabilized and then documented, it will still require an investment by ASD(I) of some DOD resources to operate a computer storage and retrieval capability. This may or may not become a problem for DOD. CIRIS has been designed in the light of computer equipment available within OCS to operate it; this requires a 360/65 -- quite a large machine -- because OCS programmers in writing CIRIS have not optimized its design for core utilization. Thus, CIA has no problem running the CIRIS on a machine with 1 million bites of core, of which the CIRIS itself may use about 250,000 bites. A smaller size machine, or a larger machine that is compartmented and hence has limited core, may not be able to accommodate CIRIS as it has been built . This is a technical consideration which ASD(I) should evaluate in any consideration of operating its own CIRIS storage and retrieval capability based on tapes provided by DCI/OCS.

6. ASD(I) Remote Terminal. This does not appear to be a feasible solution, at least in the short run, for the following reasons.

(a) It is possible to subset the CIRIS data file so as to create solely a DOD (CDIP) data base. However, at the outset a security policy question must be resolved, namely, whether on not the Office of Security is willing to recommend to the DCI that a remote terminal in a non-CIA-controlled area should be installed when the main computer driving the terminal is also running CIA internal use only programs. This is the "inadvertent spillage" problem, and as far as I know, the Office of Security has never

stated a flat position on this precise question. It is a sticky wicket.

(b) Unless Security is willing to act favorably on the policy issue, the question of a ASD(I) terminal is academic from the outset. Let us assume that Security will grudingly grant approval; there still remain possible security aspects relating to the physical security of the non-CIA spaces and as to protection against emissions (shielding). I don't know the technical status of these aspects.

(c) Assuming that Security issues are all resolved, the major problem of this course of action is that both ASD(I) and DCI/NIPE must commit to a not insignificant investment of manpower in training ASD(I) personnel in terminal use. The technicalities of the software must be taught and learned; the techniques of terminal operation must be taught and learned; and ASD(I) consumers as a whole have to know -- be willing to learn -- more than they have to date about the capabilities and limitations of CIRIS as a data system. In addition, as we all know, terminals sometimes are "down" for technical reasons; terminals require some maintenance after initial installation. These technical aspects will require some continuing level of OCS involvement to keep the ASD(I) terminal working properly; this may not be a great deal of work but it will be continuing, and because the user is external to CIA there are liable to be little bickerings and mis-understandings on both sides among technicians.

(d) It is possible, also, that a terminal in ASD(I) might noticeably degrade responses from the master computer, thus affecting other users. This is probably not a major consideration, but it should not be ignored.

(e) There are also some costs to ASD(I) for terminal equipment, rental of a line from the CIA Communication Center to the Pentagon, and security devices to be attached to the line and/or the terminal. These probably amount to several thousand dollars, but I do not have details.

(f) There is a continuing, though probably small, cost to CIA/OCS, to dedicate a spindle holding a disc pack to operate the ASD(I) terminal, as well as the need referred to above to keep the circuit up and operating satisfactorily.

(g) Another major area requiring further investigation lies in the availability of the GIM system to ASD(I). GIM is the software package used on the remote terminals for CIRIS. It is a package procured from TRW, who developed it at government expense. CIA/OCS has spent several hundred thousand dollars to expand its capability. It might or might not be possible for DOD to obtain GIM from CIA -- at an unknown cost. A pretty certain cost would be that of calling on TRW to contract for its installation in DOD, assuming they don't have it now.

(h) In summary, on this second alternative, all of the technical aspects are probably solvable, given time, and that means probably a year at least. The security policy issue should probably be faced at the outset, for there is no sense in working on technical aspects if security won't let the system be installed.

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7. <u>Manual Support to ASD(I) by NIPE/CIRIS Staff</u>. This alternative is certainly the most feasible in the short run -- over the next year.

(a) The considerations here principally involve manpower costs to both DCI/NIPE/CIRIS Staff and to ASD(I). We have to train, teach, explain; ASD(I) people have to learn and practice. Much of the time this work has to be done in the CIRIS Staff offices; this will pose a problem of the availability of physical working space. The CIRIS Staff is already crowded; will get more so as a number of new people are added in connection with the expansion of the NIPE (or DCI/IC) staff. In addition, there may be times when it would be desirable to compartmentalize the ASD(I) people from the free flow of materials and discussions within the NIPE staff.

(b) It is possible that additional terminal facilities will be needed in the CIRIS staff office to accommodate ASD(I) users. This would depend on the volume of their use. For the next 6-9 months, the competition for use of the one CIRIS terminal tied to the GIM system would make it very undesirable to have to share that terminal with ASD(I). The present configuration of GIM is limited in the speed of reply to terminals; it services terminals serially,not several together. The OCS contract with TRW for GIM-II modifications plans to make GIM capable of supporting a number of terminals at the same time; however, that modification cannot be expected to be in operation before the fourth quarter of calendar year 1972. Thereafter, this problem should be resolved.

(c) In spite of inconveniences to the CIRIS Staff due to space limitations, this alternative offers the best -- if not the only feasible -- prospects for making a meaningful contribution to ASD(I) as the quid pro quo for their support in obtaining CIRIS data.

(1) This can only be accomplished, however, if the CIRIS Staff can be expanded as provided for in the proposed T/O that I believe is tentatively approved. This will add two substantive analysts to work primarily on customer servicing. It adds one "outside man" -- probably Lt. Col. Hurwitz who becomes available on 1 April -- to help improve the quality and speed of CIRIS inputs from DOD as well as to simplify the data submissions for imputters. It adds the OCS coordinator with which you are familiar, and also a secretary or intelligence clerk for overall assistance. However, in most of these cases, I still have not been authorized to issue a job opening notice within CIA and thereby get started on recruitment. In all cases, except [   ] the productive output of these new people cannot be anticipated for several months after they are on board.

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8. <u>In summary</u>. Can you assist in preparing for this briefing of Dr. Hall by verifying -- or supplementing, altering, et al -- my views of the three alternatives. Then, can you make your conclusions known to Mr. Tweedy so that he will have a reliable appreciation of what he has to offer to Dr. Hall, the limitations, and the costs and timing.

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cc: Admiral Showers

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Remarks:

This is my request to General Taylor for
assistance to us in developing a DCI/NIPE
proposal, or response, to ASD(I) relative to
at we can do for them by way of providing
RIS output and servicing their requests --
assuming they will make some requests.

There are some technical ADP matters which
General Taylor can check out better and in a
more authoritative way than I can -- and Mr.
Tweedy will get the answers from him direct rather
than by double-check. As the memo indicates, there
are some real short-run limits as to the help we
can give ASD(I).

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Remarks:

    This memo deals with alternatives for computer-related support to ASD(I) in the use of future CIRIS data. The subject is one that may be raised by Dr. Hall later this week when he is briefed on CIRIS by Admiral Showers and myself.

    I don't know of any specific time yet for this briefing. However, this memo asks for your help in guiding us -- as briefers -- and Mr. Tweedy -- as negotiator with Dr. Hall.

    My personal preference would be that you be present and handle these matters in the Hall briefing -- provided Mr. Tweedy agrees.

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